

REMARKS

The 35 USC § 112 rejections

The Office Action alleges that claims 1-3, 5-7, 9 and 12-17 are not enabled.

The Office Action appears to have missed that claim 1 was previously amended to recite specific named rings for R¹⁴ and R¹⁵ together. The Office Action dated August 29, 2001, already admitted that the specification provides enablement for the specific rings taught for R¹⁴ and R¹⁵ together.

R⁴ and R⁵ together and R³ appear to be rejected for not having specific examples directed to all claimed species. There is no requirement in patent law to exemplify each species of a genus claimed. One of skill in the art, with routine chemical synthesis methods, can prepare each species of the claimed genus.

The Office Action alleges, for example, that R⁴ and R⁵ coming together with 2 adjacent carbon atoms to form a C₃-C₄ alkylene moiety optionally substituted in one or two places with NR¹⁴R¹⁵, is not enabled. Applicants point the Examiner's attention, for example, to page 43, example 10, of the specification where a compound is synthesized with the claimed features, including the substitution with NR¹⁴R¹⁵.

The Office Action on page 4 appears to specifically point out that no example is provided wherein R³ is a heteroatom, i.e., presumably wherein in R³ 1 or 2 CH₂ groups are optionally and independently replaced by O, S(O)_n, NR⁸, =N- or carbonyl. Replacing 1 or 2 carbon atoms in a carbon ring with another atom involves nothing more than routine chemical synthesis protocol. The Office Action has not established that one of Ordinary skill in the art would be unable to synthesize the claimed compounds. The only basis for the rejection is that the application does not specifically demonstrate the synthesis of all claimed species, i.e., the Markush grouping of radicals is allegedly much wider than those synthesized. See page 3 of the Office Action. MPEP § 2164.02 states that where a genus is claimed, but not all members of the claimed genus are taught in a working example, "proof of enablement will be required for other members of the claimed genus only where adequate reasons are advanced by the examiner to establish that a person skilled in the art could not use the genus as a whole without undue experimentation." No such proof has been established by the Examiner in the present situation. Thus, the rejection is improper.

Additionally, the law does not require an applicant to teach in an example each species of a claimed invention, or even to teach in an example any species of a claimed genus. Instead the law states that “the specification need not contain an example if the invention is otherwise disclosed in such manner that one skilled in the art will be able to practice it without an undue amount of experimentation.” *In re Borkowski*, 422 F.2d 904, 908, 164 USPQ 642, 645 (CCPA 1970). MPEP § 2164.02 is in accord and states that “compliance with the enablement requirement of 35 USC 112, first paragraph, does not turn on whether an example is disclosed.” In the present situation, one of ordinary skill in the art is fully enabled to synthesize the claimed compounds because only routine chemical synthesis methods are required to make the claimed compounds. Additionally, even though not required, the present application provides 10 representative examples to teach the synthesis of the claimed compounds.

Claims 9 and 12 to 14 have been cancelled without prejudice or disclaimer and claim 15 is directed to a single utility, i.e., a method of inhibiting NOS. Support for the amendment of claim 15 can be found, for example, on page 9 of the specification. The section 112, second paragraph, rejection over claim 15 is moot in view of the amendment. However, it is noted that this amendment has been made solely to expedite prosecution. The PTO has not established, as discussed above, that the application is deficient in terms of enablement for any of the disclosed utilities.

Reconsideration of the rejections is respectfully requested.

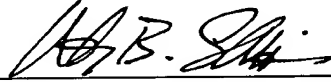
Information Disclosure Statement

Attached are the results of the German Search Report in the form of an Information Disclosure Statement with the requisite fees.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned “**Version With Markings To Show Changes Made**”.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims

The claims have been amended as follows:

Claims 9 and 12-14 have been cancelled without prejudice or disclaimer.

15. (Amended) A method for inhibiting ~~treating a neurodegenerative disease~~ ~~characterized by neuronal NDS~~, comprising ~~inhibiting neuronal NDS by~~ administering an effective amount of a compound according to claim 1 or a composition containing said compound to a patient in need thereof.